

**Curriculum Vitae****Aaron David Woolfson**

1937 Oak Park Blvd, Ste D – Pleasant Hill, Ca 94523 - (209) 915-2483 mobile

**Career Summary**

25 Years of Experience developing extremely large scale, highly efficient and accurate Database Applications, for commercial, government, aerospace, telecommunications and payroll industry, with special emphasis in IVR systems.

- Database transition planning and disaster recovery experience
- Efficient Database Design through Data modeling
- Efficient Database Table Structuring and Indexing Techniques
- Comprehensive data transformation, tallying through data analysis
- Presentation of sophisticated data in easily-understood terms
- Client-Server Database Application Design and Development
- Full understanding of Database libraries, and transaction handlers
- RDO/ADO interface techniques, incl. port 1433 direct interface
- VB6 and .NET(2.0) bounded and unbounded objects
- Web-Services data integration and multi data-source integration
- Developed extremely high performance IVR system (1.5m calls/day)
- Deep knowledge of Electronic Time Keeping Techniques
- Point of Sale Time Keeping Integration with Payroll
- GPS "as-Time Keeping" object, tracking, and analysis techniques
- Networked Multi-Location Database Components related to Timekeeping
- An early investor in, and partial developer of QL2, a data-analysis tool for turning web-pages into rich-data searchable sources of information. QL2's customers include 7 of the top 10 global airlines, 5 of the top global online travel agencies, and Global 100 energy, car rental, retail, pharmaceutical and life science companies.

**Professional Experience (*consulting that resulted in deliverables*)**

**University of Illinois, Champaign-Urbana** (1986, 1987, 1988). Employed to Program computer terminals attached to a Mainframe computer system (PLATO) that were used to generate databases containing class schedules based upon prospective students' interests and SAT scores. Curriculum was graphically represented on Plasma Display Terminals attached to the University's PLATO computer Plato Computer Mainframe. Student Curriculums included travel time between classrooms in different buildings and items related to classroom proximity. Worked under the auspices of Don Bitzer, inventor of the Plato Computer System and co-inventor of the Plasma Display Panel, and Hugh Satterlee, Ombudsman of the University of Illinois, Champaign-Urbana.

**Computer Services Office, San Joaquin Delta College, Stockton California** (1991, 1992). Maintained campus-wide network of mainframe-based computer terminals used for class scheduling and curriculum development;

**Delta Telecommunications, Stockton, Ca** (1993). Founded a California Based Public Utility (U-5410-C) focusing on a network of telephone switching systems connected to databases that were used to route telephone calls of customers within the State of California. I invented the efficient IXC-10 Network Switch and the associated databases, as there were no highly efficient telephone switches during that time that took up a small amount of space, yet could handle the demands of a full-scale telephone switching office.



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**TelSwitch, Inc., Stockton, Ca** (1994). I authored the Airnet Billing and Call Collection Database software that was used at TelSwitch, Inc for the purpose of billing residential and commercial long distance customers for the calls that they made. I wrote database formulas to establish the rating of telephone calls based upon the elements provided by the switching network: call setup, call type, call routing, and rate plan assigned to customer. Determined the rates and taxes to charge the customers on each call, based upon the rate plans assigned, the time of day, the time and duration of the call, and whether that call was intrastate, interstate, or Intra-lata. Processed millions of telephone calls through my database.

**Japan Telecom America, San Ramon, Ca** (1996). I adopted the Airnet Billing Software and Call Collection Database that I had authored to specifically meet the needs of an international telecommunications corporation doing business in the United States, Japan, and in Canada, presenting bills to customers in multiple languages and font sets, accepting various currencies, which all had to be computed against the dollar in real time.

**Oersted Corporation (Sunstrand Contract)** (1997). Designed and authored an Automation Control and Database system used for the mass-production of mission-critical magnetic armatures used in Air Conditioning, and Electric Vehicle, and Aerospace applications. I created the process control mechanism that allowed the machine to "manufacture the part" and measure the results, and report the results to a master database that contained Quality Control statistics. This machine continues to operate at a Sunstrand Corporation facility in Wisconsin and has successfully manufactured hundreds of thousands of components.

**Network Services Solutions, LLC., Reno, Ca** (2001). Customized a database for tracking the overlapping time elements of telephone calls, and establish audit trails of telephone calls through the phone network, based upon origination, destination, time, and jurisdiction. The system is in use to track the costs for telephone lines and services to hundreds of schools, dozens of hospitals, and is the backbone for a national communication network, with over five million transactions being tracked through my database monthly.

**Decisionet, St. Charles, Il. (Experian Project)** (2004). I was contacted to build a Database and Electronic Gateway "Appliance" Device for customers to acquire credit reports from Experian's secure database. The system was used to facilitate the delivery of 7.2 million credit reports to commercial users, including credit unions, banks, car dealerships. The system tracked usage, report lengths, type of reports, and reporting tools to Experian's customers to view the quantities of reports that were used through the system, types of reports, and other information pertaining to the acquisition of reports. The service allowed Decisionet to extend the life of legacy interface environments between Experian and its' clients by several years.

**BankVOD / Billing Solutions, Inc. - (Bank of America, Wells Fargo Bank, JP Morgan Chase, PNC, Bank of the West)** (2005). Designed and built a network of Database Applications for the mortgage industry using Microsoft SQL and ASP.net. The system created a protocol for banks and mortgage brokers to exchange information on the status underwriting of loan applications, providing tracking of Verification of Income, Verifications of Deposit and Verification of Mortgage applications, as well as providing the analysis back to the banks for items such as Check Verification(s). The database also triggered the disbursements of processing costs and reimbursements toward the banks. To date, my system has been an integral part of the processing of over 1.2 million mortgage applications.

**SAIC - Patriot Missile Systems / Training Division (Subcontract) (DPAS Rated)** (2007). Designed the hardware, software, and firmware used within the modern-day re-instrumented version of Patriot Missile consoles. I was tasked with developing a hardware and software combination that retained full compatibility with both modern and legacy equipment, that could provide data to commercial and proprietary databases efficiently and reliably in extreme environments. I am proud that my work is considered to be an integral part of the battle-field readiness and preparedness of ground troops, and that dozens of our implements are in use throughout the world.



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**Department of Justice, Sacramento California** (2007). Authored a specialized interface to work with a telephone company database.

**Practice Technologies, Inc.** (2007). I was contracted to develop the database to maintain the billing and session tracking portion of Real Deal Docs, part of the Real Practice Suite of document management tools used by dozens of law firms, including Littler. I had been tasked with developing the billing methods for tracking the use of Real Deal Docs, a Web Site that indexes the documents that are filed by publicly-held companies, into searchable terms, and maintaining presentations.

**Cogent Communications, Inc.** (2008). I was tasked with authoring the database system for tracking the timings and overlaps of telephone calls, and establishing an audit trail of telephone calls through the phone network, based upon time, duration, origination, destination, and other characteristics. The database continues to be used to capture hundreds of thousands of telephone transaction per month that traverse the Cogent Communications Network, and maintains a detailed audit trail of service changes and inventories of equipment and.

**Gallium Visual Systems - ATS (Air Traffic Control System)** (2008). Incorporate modern software, hardware, and firmware into Aircraft Control Training Systems. I was tasked with manufacturing Operator Keyboards and Consoles using modern day technologies as part of the Air Traffic Control Training System, enabling ATS equipment to work with USB-enabled computers, and modern data collection systems, including databases.

**First National Collection Bureau, Reno, Nv.** (2008). Built a system of interconnected databases and computers capable of capturing over 250 million telephone records per year, and deep-content analyze the telephone calls for type-of-call, timing characteristics, and customer contact effectiveness. System had to maintain a minimum of 56 million phone calls per year, any of which could be instantly retrieved. The Microsoft SQL database components required that I author an exacting set of high-performance SQL database analysis scripts in conjunction with several inter-related computers, all operating autonomously operating software programs that I wrote. I have been told that I wrote the highest performance (civilian use) telephone call analysis system in the world.

**American Automated Payroll, Charleston, Sc** (2009) - Payroll and Time Keeping. I Authored a set of scripts to work with databases to allow payroll companies to integrate their payroll systems with the telephone network. The program that I wrote allows the electronic entry of time keeping records via telephone. Employees can use a telephone to clock in and out of work sites, or an employer can use the telephone to enter time entries into their payroll production. I am an ongoing consultant to American Automated in the area of timekeeping, payroll database integration, paycheck and time clock reporting, and phone network integration. Additionally, I authored a database system that comprises of an automated inbound and outbound calling interface for customers of payroll companies to be able to input their daily time sheets into payroll programs, for purposes of generating payroll. The software and hardware mechanism that I authored interfaces with system such as "Evolution" (a popular and widely used payroll program), as well as Microsoft SQL, Oracle, and MySQL. American Automated Payroll and TelSwitch, Inc. are engaged in an ongoing partnership tasked with developing further market verticals for my software.

**Reunion Communications, La Grange, IL** (Airlink Wireless) (2010). Database for keeping track of usage, balances, and remaining minutes for a National Prepaid Wireless provider. I authored a database, and associated network interface protocol, so that customers may access real-time information about their accounts via telephone calls from their handsets. The system also maintains real-time analysis of telephone the telephone companies' databases to determine where the telephone callers are going to be routed, based upon their "OEM" handset ID, calling characteristics, and other factors. The Database, located downtown Los Angeles, is used tens of thousands of times every day by prepaid mobile carriers and their



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customers all over the country, who rely my high-performance database application's speed and accuracy to delivery timely information on real-time usage.

**Rapid Announce, a Product of TelSwitch, Inc.** (2010). I authored the combined software (database) and hardware application that is used to conduct millions of daily inquiries into several linked databases. The databases, which contain approximately three hundred thousand new collection accounts per day, are analyzed to determine to whom automated dialers should call and what those called individuals are being contacted regarding. The calls are indexed, and are reported to time tracking databases for later analysis and quality assurance. The system is currently in use by collection bureau(s), and makes decisions on hundreds of thousands of transactions per day. The system is also had been used for automated notifications in several non-collection industries.

**SAIC - Patriot Missile Systems / Training division** (2011). Tasked with adopting some of the database SQL analysis tools that I use in expert database analysis toward use in personnel management and battlefield equipment positioning. Expand the methods I developed for analyzing GPS data points, so that data points coming from disparate data sources could uniformly be applied into databases and then analyzed. According to SAIC, the database formulas that I had applied in my capacity as an expert in the Moreno, et al. v. J. Redfern, Inc. (RG08375539) closely mimic the GPS data point analysis that is conducted GPS data points from projectiles (missiles) and personnel movement.

**AggravationSense and VoiceVault, a Product of TelSwitch, Inc.** (2011). Built a database to analyze the voice characteristics of telephone calls in real-time, to determine when someone becomes aggravated, so that they can be proactively routed to customer Service supervisors. VoiceVault contains approximately 130 characteristics of the human voice, and can be used to determine whether a telephone caller is who they say they are, with a very high degree of accuracy. The partners in this project were Qwest, AT&T Business Services, Network Services Solutions LLC, and American Automated Payroll;

**Education:**

San Joaquin Delta College (1991-1994); Majored in Sociology and Cultural Anthropology.

**Publications, Awards, Authored Works**

1996, Young Entrepreneur of the year, San Joaquin County; California.

Authored Foundational White Paper on Voice Over Internet Protocol, and filed patent application on Wide Area Centrex using Internet as Communication Backbone, as part of the Tempo Networks LLC partnership between me and two of the co-founders of Worldcom.

Authored patent application for SMS (Text Message) Initiation of a telephone call between two people by connecting two outbound calls initiated by a phone switch in a foreign country. One leg was placed to the "initiating party" and the other leg to the "called party", which were connected together to create a circuit through an intermediate county.

Co-wrote a paper presented to DARPA on the best-practices method of designing a database to conduct the analysis of large volumes of Telephone Calls. Authored in conjunction with Ted Kubaitis, the founder and Chief Software Architect of QL2.

Analysis of Scheduled Flights and the Merger Effect on Flight Availability re: Merger of United Airlines and Continental Airlines (Declaration) – In Matter of the Merger of United Airlines and Continental Airlines, before the Senate Judiciary Subcommittee to Examine United/Continental Merger, May 27th, 2010, 2:15pm – Dirksen-226



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**Professional Certifications:**

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1994-2011; Certification Granted by California Public Utilities Commission (U-5410-C) to operate as a California Public Utility, after passing the standards for expertise necessary related to the operation of telephone communication systems and telephonic records database recording and billing / rating mechanisms.

2004; NACHA certification achieved for network integration of Payment Transaction Processing between financial institutions; (Bank Interchange Network).

2006-2012; Credit Card Interchange Network Certification issued by Global Payments for Software written by Aaron Woolfson related to the Networked Interchange of card member payment transactions between merchants and correspondent banks, on behalf of Master Card/Visa/American Express/Discover.

2010-2012; Certificate of PCI DSS Compliance issued by Security Metrics for maintaining best-practices in database management related to secure transaction processing between mechanized database systems.

2016-2023: Participant in the Apple Developer Program for handset based applications and programs running under iOS.

2017; Certification Granted by California Public Utilities Commission (U-7327-C) to operate as a California Public Utility as Tel-One Network Services, Inc. The company continues to operate as a *stand-alone* company.

2017-2023; TelSwitch, Inc. is registered with the Federal Trade Commission ("FTC") as Organization ID is 10159990-70991, Subscription Account Number ("SAN") 10376173-476173-21 for the daily download and use of the Federal Do-Not-Call database.

2019-2023; Certificate of PCI DSS Compliance issued by Trusted Site for maintaining best-practices related to secure transaction processing between interconnected computer systems.

2023; Authorized reseller of iConnectiv for resale of WDNC data used for maintaining compliance with TCPA; availability of, and use of data authorized by FCC-15-35A1 (03/27/2015).

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**Summary:**

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I continue to be actively involved in the development of telecommunications technology, including that used by call centers. I also continue to maintain Airnet AMS, which is used by providers of telecommunications services to bill their customers and conduct network planning.

Additionally, I been retained as either a consulting or testifying expert in database analysis in over 1,000 cases involving the analysis of timekeeping, payroll records, telephone call records, Do-Not-Call ("DNC") database records, credit card records, reimbursement records, travel records (e.g., GPS data and locations where employees worked), as well as provide analysis of technology related to Call Center and Collection Operations.

I have worked with both plaintiffs and defendants, and have been qualified by State and Federal courts as an expert in databases and as an expert in telecommunications.



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Materials, and supplies – billed to client: Airfare, Hotels, Meals, Parking, Gasoline, Car Rental.

Billable travel time charged at ½ of the regular rate, and is calculated as a measurement of the most efficient routing, not the actual duration of the flights that we choose. You will be billed for the lesser of (a) the amount of time for the flight that is actually booked, or (b) the amount of time for the alternative flight that would have been most efficient, even if we elect to take a longer flight or a flight with more connections. Time is capped at eight hours per day.

**Payments are due at time of deposition by deposing party.**

No deposition will be provided if the requesting counsel (e.g. opposing counsel) owes a balance for work done for that firm in other matters. In other words, no depositions will be given to any parties where balances are owed. This is non-negotiable.



**Aaron Woolfson's List of Cases in which Testimony was Provided  
(as a Deponent or as an Expert at Trial within approx. previous four years)**

- *Taylor Carroll et.al. v SGS Automotive Services, Inc.* (Case No. 16-537-SDD-RLB (MD, La)
- *Adrian Diaz et. al. v. Bald Eagle Security Services, Inc.* (Case No. 37-2018-00009703-CU-OE-CTL, Superior Court of California, Los Angeles County)
- *Christopher Dueker et. al. v. CRST Expedited, Inc.* (Case No. 2:18-cv-08751-FMO-FFM, ND Ca)
- *Bruce Wright, Jorge Valdes, Edwin Diaz, individually and on behalf of himself and all others similarly situated, v. eXp Realty, LLC, a Washington Limited Liability Company* (Case No. 6:18-CV-01851-PGB-TBS MD Fl)
- *Joseph Cabardo, Donnabel Suyat, Mactabe Bibat, Marissa Bibat, Alicia Bolling, Renato Manipon, Carlina Cabacongan, And John Dave Cabacongan, on behalf of all current and former employees and the State Of California v Marilyn Patacsil and Ernesto Patacsil* (Case No. 2:12-cv-01705-TLN-KLN, ED, Ca, Sacramento Div.)
- *Robert Fischer et al v. Trivita, Inc.*  
(Case No. 6:19-cv-02333-CEM-EJK, MD Fl, Orlando Division)
- *Austin and Marrero et al v Public Reputation Management*  
(Case No. 9:20-CV-80161-RS, SD Fl.)
- *Deanna Hicks et al v Houston Baptist University*  
(Case No. 5:17-cv-00629-FL, E.D., NC, Western Div.)
- *Paramjit Lalli et al v. First Team Real Estate Orange County*  
(Case No. 8:20-cv-000270-JLS-ADS, C.D. Cal., Southern Division)
- *Jodi Judson et al v. Goldco Direct, LLC*  
(Case No. 2:19-cv-06798-PSG-PLA, CD, Ca)
- *ABM Industries Overtime Cases*  
(Case No JCCP 4502, San Francisco Superior Court)
- *Kenneth Johansen, et al. v. Bluegreen Vacations Unlimited, Inc.*  
(Case No. 9:20-cv-81076-SMITH, S.D. Fla.)



- *Jeremy Gilmore et al v. Vansh, Inc.*  
(Case No. HG18930348, Superior Court of California, County of Alameda)
- *Aldapa et al. v. Fowler Packing, Co., et al.*  
(Case No. 1:15-CV-00420-DAD-SAB, ED, Ca, Fresno Division)
- *Anderson et al v. The Berry Man, Inc. and All About Produce, Inc. et al.*  
(Case No. 16-cv-0377, Superior Court of California, County of San Luis Obispo)
- *Raymunda E. Menjivar v Angelo's Gourmet Deli, Inc., Jae Choi, Anna Lee, et al*  
(Case No. C20-00885, Superior Court of California, County of Contra Costa)
- *Amanda Boardman et al v Green Dot Corporation*  
(Case No. 21-cv-00174-FDW-DSC, W.D., Nc, Charlotte Div.)
- *Annette Barnes et al v. Allsup Employment Services, LLC.*  
(Case No. 1:21-cv-21121, S.D. Fl., Miami Div.)
- *Pineda et al. v Lithographix, Inc.*  
(Case No. BC612372, Superior Court of California, County of Los Angeles)
- *Andrew Perrong et al. v Victory Phones LLC.*  
(Case No. 2:20-cv-05317-GEKP, E.D. PA)
- *Floyd Steve Bales et al v. Bright Solar Marketing, LLC*  
Case No. 5:21-cv-00496-JSM-PRL, M.D. Fl, Ocala Div.
- *George Moore et al v. Club Exploria, LLC*  
Case No.1:19-cv-02504, ND. Illinois, Eastern Div.
- *Eric Laguardia, Sophia Wingate, Lindsay Rucker and Nicole R. Austin v Designer Brands Inc., F/K/A DSW, Inc., an Ohio Corporation; and DSW Shoe Warehouse, Inc., a Missouri Corporation.* (Case No. 2:20-cv-02311-SDM-EPD, SD OH, Eastern Div.)
- *Varas et al v Paras et al* (Case No. RG20072221, Superior Court of California, County of Alameda, Eric C. Davidson Courthouse)
- *Marisol Gomez and Ignacio Osorio et al, v. J Jacobo Farm Labor Contractor, Inc. et al*  
(Case No. 1:15-cv-01489, ED, Ca)



- *Robert E. Stafford, Jr., Melissa Bonetti, Michelle Layton, Herbert Mallet, Jacqueline Johnson, Cathrine Allen, Devron Jones, Laura Shope, Tabitha Daniel, Damian Prentice, Debra Call, Laquasha Osaghee, Ronda Cole, Marquita Smith, Jennifer Wester et al v. Bo Jangles', Inc.* (Case No. 3:20-cv-266-MOC, WD, Nc, Charlotte Div.)
- *Michael Anthony v. The Federal Savings Bank, National Bancorp Holdings, Inc. and FDE Marketing Group LLC* (Case No. 1:21-cv-02509, ND, Il, Eastern Div.)
- *Mark Fitzhenry v Brokers Data, Inc.* (Case No 2:21-cv-04043-RMG, DC, Sc)
- *Nathan Rowan v Brock Pierce* (Case No 2:21-cv-04043-RMG, DC, PR)
- *Samantha Doup v Van Tuyl Group LLC et al* (Case No. 3:20-cv-02742-X, ND, TX)
- *Teresa E. Mendez Villegas, Maria Navarro, Loyda Aguilar, Olimpia Cano De Peral et.al. v. Duarte Nursery, Inc., Jeff Duarte, John Duarte, Patricia Lopez, Engracia Lopez* (Case No. 2014-212, Superior Court of Stanislaus County)
- *Annette Bayles v Hertz Corporation* (Case No. 1:22-cv-01092-JRS-MKK, SD, IN, Indianapolis Div.)
- *Dennis Glazer et al v. Sunnyvale Massage LLC and Lisa Meteyter* (Case No. CIV 527399 Superior Court of California, County of San Mateo).
- *Juan Navas et al. v. Fresh Venture Foods, et al.* (Case No. 17-CV-02222, Superior Court of California, County of Santa Barbara)
- *Carbajal et al v. Imperial Maintenance et al* (Case No. STK-CV-UOE-2016-0001100, Superior Court of California, County of San Joaquin)
- *Faucett et al v. Move.com et al* (Case No. 2:22-cv-04948-ODW-AS, CD, Ca, Western Div.)
- *Mackey et al v. Bankers Life & Casualty et al.* (Case No. JCCP No. 4954, Superior Court of California for the County of San Diego)
- *Dancey et al v. Walmart, Special Coordinated Proceeding 5136, Tamara Dancy v. Walmart Inc., et al* (Superior Court, County of Santa Clara, Case No. 19CV360648);



and *Lynette Branco v. Walmart Associates, Inc.* (Superior Court, County of Santa Clara, Case No. CV-20-002265).

- *Mohamed Mallem et al, v C&C Security Patrol, Inc.*; and, *C&C Security Patrol, Inc.* (cross-complainant) v *Manning & Kass, Ellrod, Ramirez, Trester LLP* (cross-defendant); and, *Manning & Kass, Ellrod, Ramirez, Trester LLP* (cross-complainant) v *C&C Security Patrol, Inc.* (cross-defendant) (Case No. RG16814153, Superior Court of California, County of Alameda)
- *US EEOC and Anonymous Plaintiff Intervenors 1 through 4 v. Fresh Venture Foods LLC, and Babe Farms, Inc.* (Case No. 2:21-CV-07679-CBM-DFM, CD, Ca)
- *Ma de Jesus Vergara, Pahola Ramos, Roberto Reyes, et al v. Kombu Kitchens SF, LLC (dba Nybll), Keven Thibeault, Kristen Thibeault, Alfonso Ventura et al* (Case No. RG20057449, Superior Court of California, County of Alameda) and *Aja de Coudreaux, Zena Evans, Daeun Hwang, Vera Lopez, Myriah Sims, Nicole Vassallo et al v. Kombu Kitchens SF, LLC (dba Nybll), Keven Thibeault, Kristen Thibeault, et al* (Case No. RG20058323, Superior Court of California, County of Alameda)